### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017475 Address: 333 Burma Road **Date Inspected:** 20-Oct-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

### ULTRASONIC TESTING

#### **BAY #16**

#### ZPMC NWIT: 07042

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (UT) report on this date. The members are identified as steel barrier. The weld designations are as follows:

W5-SB1-009-019; W5-Sb2-001-050; w5-sb1d-006-050; w5-sb1-018-019; w5-sb1a-001-050; w5-sb2a-001-019; w5-sb2-003-081; w5-sb1-022-019; w5-sb1-031-019; w5-sb1-008-050; w5-sb1-021-081; w5-sb12-001-081; w5-sb10-003-019; w5-sb1-002-081; w5-sb13b-001-081; w5-sb1d-001-081; w5-sb1-015-050; w5-sb1d-002-081.

This QA Inspector randomly observed the following work in progress.

# WELDING INSPECTION REPORT

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**BAY #14** 

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 054013 performing the Shielded Metal Arc Welding process on weld 012 located at PCMK SEG3011A-. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-2214-B-u2-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 039 located at PCMK VP3007-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067520 performing the Flux Cored Arc Welding process on weld 007 located at PCMK VP3007-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044801 performing the Flux Cored Arc Welding process on weld 030 located at PCMK VP3008-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201089 performing the Shielded Metal Arc Welding process on weld 002 located at PCMK VP3006-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair. Weld repair report identified as B-WR16084.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045270 performing the Submerged Arc Welding process on weld 009 located at PCMK SP3020AZ. ABF QA Mr. Shao Jian Yuan was monitoring this welding operation. The welding variables recorded by QA appeared to comply with WPS-B-T-2221-B-u2c-s-2.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

No significant conversations were reported on this date.

#### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

| <b>Inspected By:</b> | Utekar, Shrikant | Quality Assurance Inspector |
|----------------------|------------------|-----------------------------|
| Reviewed By:         | Peterson,Art     | QA Reviewer                 |